

REMARKS

The present application is directed to novel, stable, flowable slurries comprising substantially spherical micron and submicron sized alkali metal bicarbonate particles dispersed in a liquid medium. Such slurries have unique, unexpected and beneficial properties which render them exceptionally useful in a variety of applications.

To give but one example of the utility of such slurries, one of their properties relates to the speed with which the slurries completely solubilize upon dilution. Rapid dissolution provides considerable benefits in the preparation of a solution for use in connection with kidney dialysis. The alternatives to such slurries involve either the preparation and shipment of a dialysis solution per se, with consequent large weights and volumes, or the shipment of solid powder with slow dissolution times. The slurries of the instant invention, which may contain up to about 80% solids, have practically the same ease of shipment in terms of weight and volume as would solid bicarbonate powder, yet their rapid dissolution allows practical, rapid, on site solution preparation.

Claim 3 has been rejected under 35 U.S.C. 112, second paragraph, as the alternative expression "and/or" is deemed indefinite. The objectionable terminology has now been deleted. The terminology "micron sized and/or submicron sized" found in original claim 3 was in any event redundant, as the claim goes on to recite "said particles having a median particle size of from about 0.2 to about 50.0 " microns. Thus, deletion of the objectionable "and/or" expression clarifies the claim without affecting its scope.

Claims 3-13 and 24 are rejected under 35 U.S.C.103 as being unpatentable over Masters et al (U.S. 5,855,871) and claims 14-16 and 23-25 have been rejected over Masters et al in view of Itob (U.S. 5,071,588).

The Examiner asserts that Masters discloses a composition containing alkali metal bicarbonate in an amount up to about 15% by weight. Applicants believe that original claim 3 distinguished from that compositions of Masters in that parameters specified by applicants, for example loose bulk density, are inconsistent with the Masters composition. However, applicants have now amended claim 3 to make clear that the slurries of their invention in fact contain 50% to 80% by weight of the bicarbonate. This was a limitation previously contained in claim 6. It is submitted that this amendment makes clear that the composition claimed by applicants differs so substantially from the composition of Masters, which contained no more than about 15% of weight of bicarbonate in a non-aqueous suspension that it can no longer be contended that the teaching in Masters would lead one skilled in the art to, or otherwise make obvious, applicants' invention. The further limitation in amended claim 6 regarding the amount of bicarbonate in the slurries finds support at page 7 lines 5 to 10 of the Specification.

Claims 14-16 and 23-25 are rejected under Masters, applied as above, in view of Itob, who teaches a sodium bicarbonate dialysate. Itob teaches the use of free flowing bicarbonate powders for use in preparing a conventional dialysate solution. Itob teaches that such powders should contain particular particle sizes in order to achieve the free flowing property, that particles of too small a size will not free flow, and that particles larger than a particular size will be slow to dissolve. See Itob at Col. 2 lines 6-25. In sum, Itob is concerned with the preparation of powdered formulations from which dialysate solutions may be prepared. This is in sharp contrast to applicants who are concerned with stable slurries which have a similar end utility to

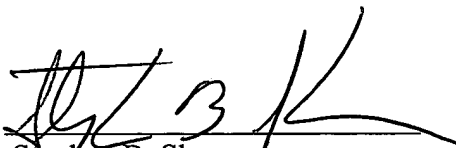
the powders of Itok, but which slurries offer a large and unexpected advantage in terms of reduced dissolution times. Note that the particle sizes required by Itok can be achieved using conventional granulating procedures, as opposed to the grinding which applicants utilize to achieve unique spherical particles which are intended to be utilized in slurries, not as flowable powders. In sum, Itok does not supply a teaching which when combined with Masters would make obvious applicants invention.

CONCLUSION

Applicants believe that the claims as amended clearly define the invention, which is both novel and useful, and which is non-obvious in view of the prior art. According, allowance of all of the now pending claims is respectfully solicited.

It is believed no fee is due in connection with this amendment. However, if any fee is due, please charge Deposit Account 03-1920.

Respectfully Submitted,


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